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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/728,916	12/08/2003	Minehiro Tonosaki	246219US6	9663

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EXAMINER
LEO, LEONARD R

ART UNIT	PAPER NUMBER
3744	

NOTIFICATION DATE	DELIVERY MODE
05/09/2008	ELECTRONIC

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

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Advisory Action Before the Filing of an Appeal Brief	**Application No.** 10/728,916	**Applicant(s)** TONOSAKI ET AL.	
	Examiner Leonard R. Leo	**Art Unit** 3744	

--The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

THE REPLY FILED 04 April 2008 FAILS TO PLACE THIS APPLICATION IN CONDITION FOR ALLOWANCE.

1. ☒ The reply was filed after a final rejection, but prior to or on the same day as filing a Notice of Appeal. To avoid abandonment of this application, applicant must timely file one of the following replies: (1) an amendment, affidavit, or other evidence, which places the application in condition for allowance; (2) a Notice of Appeal (with appeal fee) in compliance with 37 CFR 41.31; or (3) a Request for Continued Examination (RCE) in compliance with 37 CFR 1.114. The reply must be filed within one of the following time periods:
   a) ☐ The period for reply expires _____months from the mailing date of the final rejection.
   b) ☒ The period for reply expires on: (1) the mailing date of this Advisory Action, or (2) the date set forth in the final rejection, whichever is later. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of the final rejection.

   Examiner Note: If box 1 is checked, check either box (a) or (b). ONLY CHECK BOX (b) WHEN THE FIRST REPLY WAS FILED WITHIN TWO MONTHS OF THE FINAL REJECTION. See MPEP 706.07(f).

Extensions of time may be obtained under 37 CFR 1.136(a). The date on which the petition under 37 CFR 1.136(a) and the appropriate extension fee have been filed is the date for purposes of determining the period of extension and the corresponding amount of the fee. The appropriate extension fee under 37 CFR 1.17(a) is calculated from: (1) the expiration date of the shortened statutory period for reply originally set in the final Office action; or (2) as set forth in (b) above, if checked. Any reply received by the Office later than three months after the mailing date of the final rejection, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

NOTICE OF APPEAL

2. ☐ The Notice of Appeal was filed on _____. A brief in compliance with 37 CFR 41.37 must be filed within two months of the date of filing the Notice of Appeal (37 CFR 41.37(a)), or any extension thereof (37 CFR 41.37(e)), to avoid dismissal of the appeal. Since a Notice of Appeal has been filed, any reply must be filed within the time period set forth in 37 CFR 41.37(a).

AMENDMENTS

3. ☐ The proposed amendment(s) filed after a final rejection, but prior to the date of filing a brief, will not be entered because
   (a) ☐ They raise new issues that would require further consideration and/or search (see NOTE below);
   (b) ☐ They raise the issue of new matter (see NOTE below);
   (c) ☐ They are not deemed to place the application in better form for appeal by materially reducing or simplifying the issues for appeal; and/or
   (d) ☐ They present additional claims without canceling a corresponding number of finally rejected claims.

   NOTE: _____. (See 37 CFR 1.116 and 41.33(a)).
4. ☐ The amendments are not in compliance with 37 CFR 1.121. See attached Notice of Non-Compliant Amendment (PTOL-324).
5. ☒ Applicant's reply has overcome the following rejection(s): 51.
6. ☐ Newly proposed or amended claim(s) _____ would be allowable if submitted in a separate, timely filed amendment canceling the non-allowable claim(s).
7. ☒ For purposes of appeal, the proposed amendment(s): a) ☐ will not be entered, or b) ☒ will be entered and an explanation of how the new or amended claims would be rejected is provided below or appended.
   The status of the claim(s) is (or will be) as follows:
   Claim(s) allowed: _____.
   Claim(s) objected to: _____.
   Claim(s) rejected: *11,12,14-16,25,27,29,31,32,36,38,40,44,48,49,51 and 53*.
   Claim(s) withdrawn from consideration: *17,18,20-22,26,28,30,34,37,39,41-43,45-47,50,52 and 54*.

AFFIDAVIT OR OTHER EVIDENCE

8. ☐ The affidavit or other evidence filed after a final action, but before or on the date of filing a Notice of Appeal will not be entered because applicant failed to provide a showing of good and sufficient reasons why the affidavit or other evidence is necessary and was not earlier presented. See 37 CFR 1.116(e).
9. ☐ The affidavit or other evidence filed after the date of filing a Notice of Appeal, but prior to the date of filing a brief, will not be entered because the affidavit or other evidence failed to overcome all rejections under appeal and/or appellant fails to provide a showing a good and sufficient reasons why it is necessary and was not earlier presented. See 37 CFR 41.33(d)(1).
10. ☐ The affidavit or other evidence is entered. An explanation of the status of the claims after entry is below or attached.

REQUEST FOR RECONSIDERATION/OTHER

11. ☒ The request for reconsideration has been considered but does NOT place the application in condition for allowance because: See Continuation Sheet.
12. ☐ Note the attached Information *Disclosure Statement*(s). (PTO/SB/08) Paper No(s). _____
13. ☐ Other: _____.

/ Leonard R. Leo /
Primary Examiner
Art Unit: 3744

Continuation of 11. does NOT place the application in condition for allowance because:

Applicants' remarks with respect to the rejection under 35 U.S.C. 112, first paragraph, are not persuasive. The Examiner does not object to the existence of a "plurality of substrates," rather a pair of substrates, such that a glass to glass structure is formed. As disclosed, the bonded substrates will comprise a glass to silicon structure.

Applicants' remarks with respect to the impropriety of combining Kirshberg et al and Steele et al or Uchida et al are not persuasive. The citation from the Office action mailed on February 5, 2008 included a typographical error and is reproduced correctly below.

"In this case, Steele et al or Uchida et al are drawn to heat transport devices. The size of the devices is of ***no*** consequence, since the mechanisms or thermodynamics of the devices are fundamental, i.e. heat transfer surfaces coated with a hydrophilic silicon dioxide to improve heat transfer. The prior art couldn't be more pertinent and analogous art."

In response to applicants' remarks with respect to the specific processes disclosed by Steele et al or Uchida et al, the Office action further stated,

"The test for obviousness is not whether the features of a secondary reference may be bodily incorporated into the structure of the primary reference; nor is it that the claimed invention must be expressly suggested in any one or all of the references. Rather, the test is what the combined teachings of the references would have suggested to those of ordinary skill in the art. See *In re Keller*, 642 F.2d 413, 208 USPQ 871 (CCPA 1981). Thus, one of ordinary skill in the art would employ the teachings of Steele et al or Uchida et al to apply a hydrophilic coating of silicon dioxide or silicate for the purpose of improving wetting and wicking properties to improve heat transfer. A person having ordinary skill in the art would employ any known methods to form the silicon dioxide coating."

Again, applicants' argument that the specific process of Steele et al or Uchida et al to obtain a silicon dioxide layer cannot be physically practiced or employed in Kirshberg et al is misplaced. It is the teaching of Steele et al or Uchida et al to employ a silicon dioxide coating to improve wicking for heat transfer that the Examiner relies upon in the combination. One of ordinary skill in the art would recognize the specific process would not be physically possible and would employ any knowns methods of forming a silicon dioxide layer.

The recitation of "oxidation" has been considered as a product-by-process limitation. See MPEP 2113. As demonstrated by Steele et al or Uchida et al, a silicon dioxide layer may be obtained by employing methods other than oxidizing (e.g. ion implantation, thermal or steam as disclosed).

In conclusion, applicants are kindly reminded that the present claims are product claims, not method claims. Thus, most of applicants' concerns above are less applicable.